

2003 Transportation Summit Planning Team

Experts Comment on

COMMERCE AND TRADE

COMMERCE & TRADE

October 13, 2003

8:30 a.m. to 4:30 p.m.

Secondary Center, Lake Michigan Conference Room, Lansing, MI

AGENDA

WELCOME

Facilitator: Kirk Steudle, MDOT Chief Deputy Director

Discussion Moderators:

Leon Hank, MDOT Chief Administrative Officer
Bob Chaprnka, President, Michigan Railroad Association
Ron Marabate, Manager, Information Services Division,
Michigan Economic Development Corporation

EXPERTS SPEAKING ON THE ISSUES

**Michigan's Economic
Development Programs &
Importance of Transportation
Infrastructure to Michigan
Businesses**

Carole Sorenson, Research Director,
Michigan Economic Development Corporation

Michigan's Tourism Industry

David M. Morris, Director of Web Services &
Research Division, Travel Michigan,
Michigan Economic Development Corporation

**Impact of Transportation on the
Auto Industry**

Gabrielle Bagnasco, Manager, Logistics & Strategy,
Daimler-Chrysler Corporation

**Role of Railroads in
Transportation**

Tom Drake, Regional Vice President State Relations,
CSX Transportation

Aviation & Commerce

Dick Lilly, Director,
Michigan Business Aviation Association

Trucking & Trade

Walt Heinritzi, President,
Michigan Trucking Association

Maritime and Trade

David L. Knight, Project Manager, Transportation &
Sustainable Development, Great Lakes Commission

**The Economic Importance of Our
Border Crossings**

Kris Wisniewski, Federal / Bi-National Policy Specialist,
Policy Division, Michigan Department of Transportation

PLANNING ITEMS

Planning Team's Comments on the Issues

Drafting the Issues, Goals and Action Plans

Michigan's Economic Development Programs & Importance Of Transportation Infrastructure to Michigan Businesses

Expert Speaker: **Carole Sorenson, Research Director**
Michigan Economic Development Corporation

Michigan Economic Development Corporation (MEDC)

- Very good success over the past 5 years.
 - We ranked #1 for new and expanded facilities for 1991 and ranked 2nd this past year.
-

MEDC Objectives

- **Grow Michigan's Economy**
 - **Retain Michigan Business**
 - **Attract New Business to Michigan**
 - **Foster Michigan's Emerging Business Sector**
 - **Strengthen Michigan's Core Communities**
 - **Market Michigan**
 - There are a number of strategies to strengthen MI communities.
-

Key Programs

- **Account Managers**
 - **5000+ visits per year**
 - **Identify key business issues**
 - **Tri-Technology Corridor**
 - **Life Sciences, Auto, Homeland Security**
 - **Manufacturing Matters**
 - **Ensure the stability of manufacturing sector**
 - 20-25 staff people assigned geographically around the state who deal with 5,000 businesses per year.
 - One of the purposes of MEDC's is to help link businesses to state resources, training, department issues, one-stop resources.
 - Foster emerging business.
 - One billion dollars over the next 20 years.
 - Tri-Technology Corridor program was launched in 1999; pledged over a billion dollars for this program.
 - 2.7 million manufacturing jobs gone in the last 2 years nationally; 114,000 in Michigan.
 - Michigan is adding new businesses at a faster rate than any other state in the country.
 - Governor Granholm will be hosting a manufacturing summit later this fall.
-

**Economic
Development &
Infrastructure**

- **Transportation services are vital to the business community.**
 - **Products and supplies must be moved in and out of the state in an efficient and timely manner.**
 - **Road, air, and shipping concerns are often raised by business.**
 - This is vital to virtually every Michigan business.
 - The ability to get raw materials and supplies in and to get products out efficiently is very important.
 - Appreciate the emphasis MDOT places
-

**Michigan's
Infrastructure**

- **MEDC conducted a comprehensive study of Michigan's business competitiveness in 2002.**
 - **Infrastructure was a key sector reviewed.**
 - **Michigan ranked well, but there is room for improvement.**
 - A study was commissioned about 1½ years ago.
 - Everything from workforce to education, including transportation issues.
 - Michigan was compared to 17 other states in this study.
 - Study results were completed in May of 2002.
-

**Infrastructure:
Strengths and
Weaknesses**

- **Strengths**
 - **Utility reforms offering competitive choice**
 - **New Midfield Terminal in Detroit**
 - **Weaknesses**
 - **Low number of flights per capita**
 - **High level of urban traffic congestion**
-

**Scheduled
Flights per
Capita
Benchmark
Rank: 11
National Rank:
20**

- **Scheduled Flights per Capita graph of 18 states (including Michigan)**
 - Relied entirely on published data.
 - Data was collected by the USDA Transportation.
 - Michigan ranks 11th among the 18 benchmarked states.
 - Michigan is in the bottom half of the rankings.
-

**Infrastructure:
Number of
Scheduled
Direct
International
Flights (2000)**

- **Number of Scheduled Direct International Flights graph**
- Michigan fared a little better here; ranked 9th among the 18 benchmarked states.

**Highway
Congestion**

- **Percent of highway miles with congestion (2000) graph**
- **Top line on graph indicates urban highways.**
- **Bottom line on graph indicates highway miles.**
- In regards to highway congestion for total miles, Michigan fared very well and was ranked 8th.
- Our urban highways are not as competitive with a ranking 16.7%; which ranks us at the bottom of the benchmarked states.
- Michigan ranks 41st nationally.

**Case Studies:
Michigan
Economic
Development
Corporation
(MEDC)**

- We were asked to describe a recent project with a significant transportation component. How we worked with MDOT and how important transportation is.
- The Global Alliance project was the first North American venture in the country of its kind.
- Announced in April 2003, they will build in Dundee, Michigan. Michigan won rather than Indiana.
- The location for this plant is at Exit 17 off of US-23 and production will begin in April 2005.
- Ultimately creating 400 jobs with an average rate of \$23 per hour.
- In addition our economic modeling will have more than 700 spin-off jobs. This ripple effect reaches very significant portions.
- Transportation was a crucial factor in Michigan being picked by Global Alliance.
- They needed convenient access to ship engines to manufacturing plants, along with supplier bases.
- One requirement was good access to folks in the north and south.
- In order to meet transportation, a true partnership was formed with MDOT, MDEC, and Monroe County and the city of Dundee.
- Funds were provided by MDOT, MDEC, local funds, and the company carried part of the cost for road improvements.
- At the time the company made their decision, there was already improvements being planned for US-23 which helped them make their decision.
- Without staff support, assistance and funding from MDOT this would not have been possible; grateful for good MDOT partnership.
- Transportation could make or break a deal.

Michigan's Tourism Industry

Expert Speaker: **David M. Morris, Director of Web Services & Research Division,
Travel Michigan, Michigan Economic Development Corporation**

2002 Michigan Travel Data

- **Visitor Spending** **\$15 billion**
 - **Jobs** **188,000**
 - **State Taxes Generated** **\$868 million**
 - **Volume (person-days)** **189 million**
 - **79% leisure, 21% business travel**
 - **Rank in total & leisure travel volume - 7th**
 - Statistics on size and importance of travel industry in Michigan show that travel is the second largest industry in Michigan.
 - State Taxes Generated, does not count local or federal taxes.
 - 35,000 businesses in Michigan are dependent on non-resident travelers.
 - Two-thirds of trips taken in Michigan are by our own residents.
-

Travel Michigan's Programs

- **Marketing – Advertising, Publications, Press and PR**
 - **Consumer Fulfillment – Web Services, Call Center, Welcome Centers**
 - **Research – Planning, Evaluation, Industry Impact**
 - There are three basic areas in Travel Michigan Works, i.e., Great Lakes, Great Times.”
 - We advertise Michigan to our major cities in our surrounding states such as Chicago, Indianapolis and Cleveland.
 - We publish in one magazine and have a fair amount of press releases. Most press releases are in state press releases.
 - We have billboards throughout the state advertising our website.
 - The website is one of the most important and dramatically changing phenomenons in Michigan.
 - Website usage is growing. The rates have doubled, tripled in the past six years.
 - With website sessions increasing, our toll free number usage is generally declining quite significantly.
 - Joint call center also receives business service types of calls. There is also the Welcome Center program, which will be discussed later in this presentation.
 - Research programs gather a lot of statistics; evaluate effectiveness of campaigns, and future campaign research; and how people use the website to travel.
-

**TM's
Promotion
Budget**

- **FY '04** **\$5,717,500**
- **FY '03** **\$6,417,500**
- **FY '02** **\$7,442,500**
- **FY '01** **\$8,042,500**
- These numbers are not a lot different than other state agencies.
- Reviewed budget from FY01-FY04.
- These monies come from the general fund.

**Transportation
Type in
Michigan:
Part of
Michigan's
Tourism
Infrastructure**

Business and Leisure Travel

Type of Transportation	Destination State	
	Michigan	<i>all other states</i>
TOTAL	100.0%	100.0%
Car	66.6%	60.0%
Van/Small Truck	14.4%	11.3%
Airplane	9.5%	19.8%
Camper / RV	4.1%	2.6%
Large Truck	2.9%	2.8%
Bus	1.8%	1.8%
Train	0.4%	0.5%
Other	0.3%	0.8%
Ship	0.1%	0.4%

Leisure Travel Only

Type of Transportation	Destination State	
	Michigan	<i>all other states</i>
TOTAL	100.0%	100.0%
Car	68.9%	63.2%
Van/Small Truck	15.1%	11.7%
Airplane	7.2%	17.0%
Camper / RV	4.0%	2.9%
Large Truck	2.7%	2.0%
Bus	1.4%	1.6%
Other	0.4%	0.8%
Train	0.2%	0.4%
Ship	0.1%	0.4%

- **Chart of Modes of Transportation for Business and Leisure Travel; Leisure Travel**
- Mostly concerned about leisure travel.
- Michigan has a significantly higher dependence on automobile transportation than other states.
- Michigan does less air travel than other states. The main reason for this is that most of the travel in Michigan is by our own residents or residents from surrounding states.
- Air travel in northern Michigan can be expensive.

**Other Michigan
Tourism Issues**

- **Signage – Concerns in the tourism industry that sign and billboard requirements are more restrictive than necessary.**
- **Highway Expansion/Development Decisions – Concerns that decisions about the need for new or expanded highways are based on current demand rather than economic development potential.**
- Signage on Michigan's highways is one of the most intensive issues in Michigan.
- Billboards always generate a great deal of reaction at local meetings.
- The perception of tourism industry in Michigan is overly vigorous in enforcement of rules and regulations regarding billboards.
- There was a recent land use report that came out regarding the billboard issue, we are not taking a position on the billboard issue; however, this is an important issue in the tourism industry.
- Decisions to expand, improve highways in Michigan and how much or

what highways to improve.

- Based on demand, we have increased economic development for such areas as US-23 and US-31 for examples.
 - There would be a lot more development if there was better access to our highways.
-

**Welcome
Centers:
Valuable
Industry
Resource**

- **Map Showing Locations of Michigan Welcome Centers**
 - There are 13 Welcome Centers in Michigan.
 - Michigan is unique with a couple of interior Welcome Centers.
 - Impact study shows that visitors generate \$32 billion at Welcome Centers across the state.
 - There is a new Welcome Center in Coldwater and plans for a new Welcome Center in Monroe.
-

**Welcome
Center Visitors**

- | Yr. | Visitors |
|------|-----------------------|
| 2003 | 6,403,094 (thru Aug.) |
| 2002 | 8,452,867 |
| 2001 | 8,389,781 |
| 2000 | 8,504,030 |

Data Adjusted for Closure of Coldwater in Dec. 2001

- Statistics show that numbers of visitors to Welcome Centers have been fairly steady during the last three years.
 - Fairly significant in travel programs in Michigan.
-

**Questions and
Answers**

- Q What do Michigan business and Michigan tourists and travelers need from MDOT?
- A We know from the business community that specific issues vary as specific businesses vary. Our ability to build a good foundation is flexibility to meet specific needs. People usually don't change vacation plans due to poor quality of roads, however, bad roads are mentioned a lot. Our call centers get a lot of calls on these issues. MDOT plays a role on where and how much to travel in Michigan.
- Q Why is the signage situation in Michigan more restrictive than other states?
- A This is certainly a perception, not sure how big of an issue this is in other states; however, this issue comes up constantly. Perception is that Michigan is way too restrictive. Extraordinarily expensive.
- Q In terms of the 15 billion, is there a breakdown by different activities, such as sports, arts, camping, etc.?
- A There have been some extensive studies on different aspects of tourism in Michigan. The Travel Michigan website has sites for industry,

education, career development, health, family, sports, etc.. Impact studies done by MSU shows that annually \$750 million are generated by the golf industry. There have also been other studies that measured economic impact in Michigan.

- Q Any thoughts on improving Welcome Centers in Michigan? For example like the Service Centers on the Ohio Turnpike and in Canada?
- A The restaurant industry regards this as unfair competition. Generally speaking industry is opposed to this. Different where you have limited access. Because of the way Michigan's freeway system is, it's better to invest in development of highway systems to make their businesses near highways more accessible.
- Q In the future, will there be network connections at the Welcome Centers?
- A There is a unique relationship with Michigan Department of Transportation (MDOT). MDOT runs the day-to-day operations and works in cooperation with Travel Michigan at the Welcome Centers. Vending food services at Michigan Welcome Centers are under federal regulations that prohibit serving foods on highways. In Michigan, only Commission for the Blind can have vending services at Welcome Centers. We are looking for new technology to get faster website access at the Welcome Centers; one factor is connection speed.
-

Impact of Transportation on the Auto Industry

Expert Speaker: **Gabrielle Bagnasco, Manager, Logistics & Strategy**
Daimler-Chrysler Corporation

Commerce and Trade Transportation Planning

- **Gabrielle Bagnasco**
Manager, Chrysler Group Logistics Strategy
DaimlerChrysler Corporation
 - Message is: stress the importance of the state's transportation system to our industry.
-

Transportation Objectives

- **Safe, efficient movement of people, goods and services**
 - **Support of existing infrastructure and funding for expanded capacity**
 - **Integration of technology**
 - **Improvement of U.S. / Canada Border**
 - **Multi-modal connection to a global marketplace**
 - Transportation objectives include employees, parts and materials going to our facilities, and finished products delivered to our customers.
-

Michigan and the Automotive Industry

- **Historic Link to the Automotive Industry**
 - **Dominated by Manufacturing – 40% of Michigan's economy linked to Transportation Equipment**
 - **Recent growth due in large part to increases in productivity**
 - Obvious and historic link to the transportation industry.
 - Challenging economic times we're currently facing.
 - Higher usage of transportation systems is due to increase in productivity.
-

Automotive Industry

- **Productivity Growth means:**
 - **Inventory reduction**
 - **More frequent deliveries**
 - **Higher density**
 - **Continued implementation of JIT techniques**
 - **Each part, each shipment is increasingly critical**
 - **Shippers less tolerant of delays**
 - **JIT (Just In Time) message; we need a reliable, consistent transportation system.**
-

**Michigan
Transportation
System**

- **Support existing infrastructure**
 - **Ensure availability of existing capacity**
 - **“Fix it First” Program**
 - **Identify and resolve significant bottlenecks**
 - **Plan necessary repairs and maintenance**
 - Encourage the state to get input from industry where these key bottlenecks occur.
-

**Michigan
Transportation
System**

- **Provide funding for expanded capacity**
 - **Plan for future economic growth**
 - **Implement strategically**
 - **Funding for key highway capacity expansion projects**
 - **I-75, I-94, I-96, I-69, M-59**
 - **Improvements in intermodal connections**
 - Always encourage funding for highways projects, especially in southeast Michigan.
-

**Michigan
Transportation
System**

- **Expand the use of technology**
 - **Implement intelligent transportation systems**
 - **Improve traffic management**
 - **Provide advance notification**
 - **Reduce congestion and associated delays**
 - **Increased cost**
 - **Reduced productivity**
 - Congestion/down time can cost a manufacturer up to \$1.5 million per hour in lost revenue.
-

**Automotive
Trade Facts**

- **87% of the value of Canadian exports came to the U.S.**
 - **25% of U.S. exports go to Canada; Two-thirds to Ontario**
 - **One-third of U.S./Canada trade is auto industry related**
 - **Michigan exports \$50 million per year to Canada**
 - **More than 70% of U.S./Canada trade is carried by truck**
 - **The U.S. and Canada share the largest bilateral trade partnership in the world.**
-

**U.S. / Canada
Border**

- **Half of this two-way trade crosses at either Detroit/Windsor or Port Huron/Sarnia**
- **Critical link in NAFTA supply chain**
- **Prioritize short term border improvements**
 - **Facilitate access to the border**
 - **Improve processing times**
 - **Incorporate technology to improve operations**

Continued on next page

- The U.S./Canada Border has seen a lot of improvements initiated since 9/11.
 - Some improvements have been pretty successful and helped industry.
 - On a day to day basis as long as the “threat level” is yellow, we don’t see too many delays at the border. However, if the “threat level” changes to orange we see delays up to 4-6 hours.
-

**Global
Marketplace**

- **Michigan is at the center of the global automotive marketplace**
 - Look for MDOT to assume a leadership role. If the Ambassador Bridge would close for any reason, it would deeply upset our national economy.
-

**Global
Marketplace**

- **Invest in multi-modal transportation infrastructure**
 - **Highways**
 - **Rail**
 - **Intermodal**
 - **Ports**
 - **Airports**
 - **Ensure access to the region**
 - Ensure that Michigan stays in the center of the automotive market as companies become more global.
 - Michigan needs connectivity of highways, rail, intermodal, ports and airports.
 - This needs to be accomplished through a regional integrated transportation system.
-

**Automotive
Needs**

- **Long term planning to accommodate growth and ensure consistent, fluid movement of freight**
 - **Government recognition of the importance of transportation infrastructure**
 - **Balance improvements to existing system with future capacity requirements**
 - **Streamline planning and environmental review process to speed up program delivery**
 - **Invest in border crossing infrastructure and intermodal connectivity**
 - State and federal government to streamline the planning and environmental review process.
-

Q&A

- Q The need for funding to maintain what we have and do some capacity improvements. Is DaimlerChrysler taking a position at the federal and state level? Does DaimlerChrysler have any position on increases to fuel taxes at either the federal or state level?
- A DaimlerChrysler, as well as other automotive companies, are involved and stay abreast of some of the issues like the TEA21. We support Michigan through Chamber of Commerce efforts to increase amount of revenue through the federal authorization bill. This support is communicated to the DaimlerChrysler office and they in turn take it to Congress. As an automotive company, we don't encourage increasing taxes as this would impact our customer base.
- Q Truck lanes might be done through some demonstration work on major corridors; would that be a help to your business?
- A Not aware of that proposal. A study would need to be performed. On the surface this is something DaimlerChrysler would be interested in. Westbound movement of traffic in Michigan is an issue. It sounds like whenever we can have transportation services to address traffic congestion is something we would support.
- Q Signage can be an issue, it's not a glamorous but a simple thing; is the lack of signage an issue or concern for DaimlerChrysler?
- A Signage where it enables notification of delays and potential congestion would be of interest to DaimlerChrysler. In terms of border congestion, if we have signage or better information, congestion could be converted at border crossings or in metro areas.
- Q Intermodal transportation needs to be coordinated as well as increased. DaimlerChrysler uses the intermodal freight terminal, which concept do you prefer?
- A DaimlerChrysler is a participant to the Detroit Intermodal system. No position right now; however, we absolutely support the completion of the study. Intermodal operations are important to the state.
-

Role of Railroads in Transportation

Expert Speaker: **Tom Drake, Regional Vice President State Relations, CSX Transportation**

The Role of Railroads In Transportation

- **North America's freight railroads can, and should, play a greater role in meeting the transportation challenges of the future.**
 - **Why?**
 - Railroads have a historical role in Michigan.
 - This presentation will give a quick overview of current status of railroads in Michigan and nationally; talk about some challenges, restraints, and possible solutions.
 - Why should you care?
 - Significant social advantages for moving a larger segment of the freight by rail.
-

Moving Freight By Rail:

- **Frees Highway Capacity and Reduces Congestion**
 - **one boxcar equals 3-4 trucks**
 - **Makes Michigan Business More Economically Competitive**
 - **rail rates have dropped 29% since 1981**
 - **Saves Fuel**
 - **trains are three times more fuel efficient than trucks**
 - **Helps Preserve Our Environment**
 - *the U.S. EPA estimates that a train emits three times less the pollution than a truck per ton unit*
 - The standard length of a train is 60 cars.
 - At this length rail transportation can move about 210 semi trucks.
 - Rail rates are cheaper than truck rates.
 - Can be more competitive by rail freight and more fuel efficient.
 - American Society of Mechanical Engineers reported that by shifting 10% of trade market from truck to rail there fewer pollutants in the air.
 - There would be 2.5 million tons less of carbon dioxide in the air.
-

Michigan's Rail Network

- **Listing of Michigan's rail network.**
 - Served by private railroad companies that represent class 1, 2, 3.
 - Classification based on revenues.
 - Distinguishes of the different classes: Class 1 is for large inner-city, inner-state trunk carriers. Class 2 and 3 carriers are no larger than 10 miles in length. Class 2 and 3 carriers usually gather and brings product to a Class 1 carrier. Class 2 and 3 will disseminate to final destination.
-

Michigan's Railroads

- **25 Railroads**
 - **3,399 miles of track**
 - **2.2 million carloads moved**
 - **84.4 million tons carried**
 - 84.4 million tons carried by rail equals about 2 million semi trucks.
 - 70% of finished automobiles are shipped by rail.
-

Michigan's Railroads

- **Maintain their own "roads"**
 - **\$1 billion spent on rail line improvements in Michigan in the last decade alone.**
 - Annually invest about \$100 million every year in the maintenance of tracks.
 - Fees and revenues are garnered from our customers.
-

Moving Our Economy

- **Coal** **3.2 million tons**
 - **Metallic Ores** **8.5 million tons**
 - **Chemicals** **.3 million tons**
 - **Metal Products** **2.7 million tons**
 - **Petroleum** **2.1 million tons**
 - **Other** **10.5 million tons**
 - **Tons Terminated, 2001**
 - Examples of freight that originates in Michigan.
 - Coal goes to public utilities to generate electricity.
-

Moving Our Economy

- **Coal** **3.2 million tons**
 - **Metallic Ores** **8.5 million tons**
 - **Chemicals** **.3 million tons**
 - **Metal Products** **2.7 million tons**
 - **Petroleum** **2.1 million tons**
 - **Other** **10.5 million tons**
 - **Tons Terminated, 2001**
 - Coal goes to public utilities to generate electricity.
-

Michigan's Rails & Industry

- **Michigan's unique geography**
- **Maintaining competitive position**
- **Strong Rails = Strong Industry**
- Michigan is in a unique situation by being a peninsula. It is least likely to be part of the national through routes.
- Companies in Ohio are closer to east-west routes than Michigan.
- We need to make sure that businesses in Michigan have the abilities to get to those routes.
- Michigan has to be able to access the national and world markets for our

International Exporter

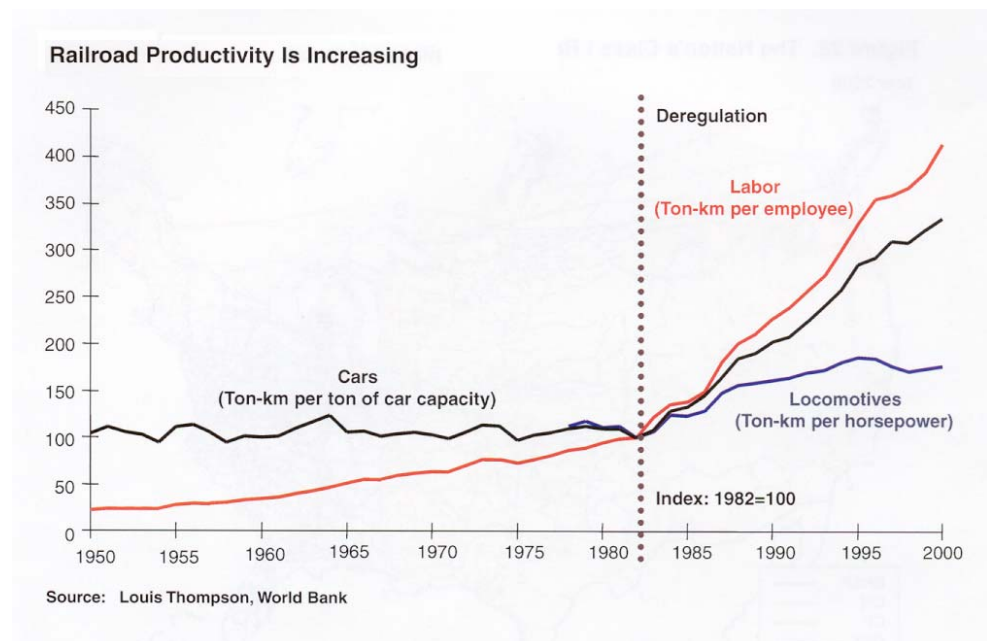
products.

- **\$8 billion worth of autos and parts to Canada**
 - **\$3 billion worth of autos and parts to Mexico**
 - There are two rail tunnels to Canada; one in Detroit and the other in Port Huron, along with some underwater tunnels.
-

The Nation's Class I Railroad Network

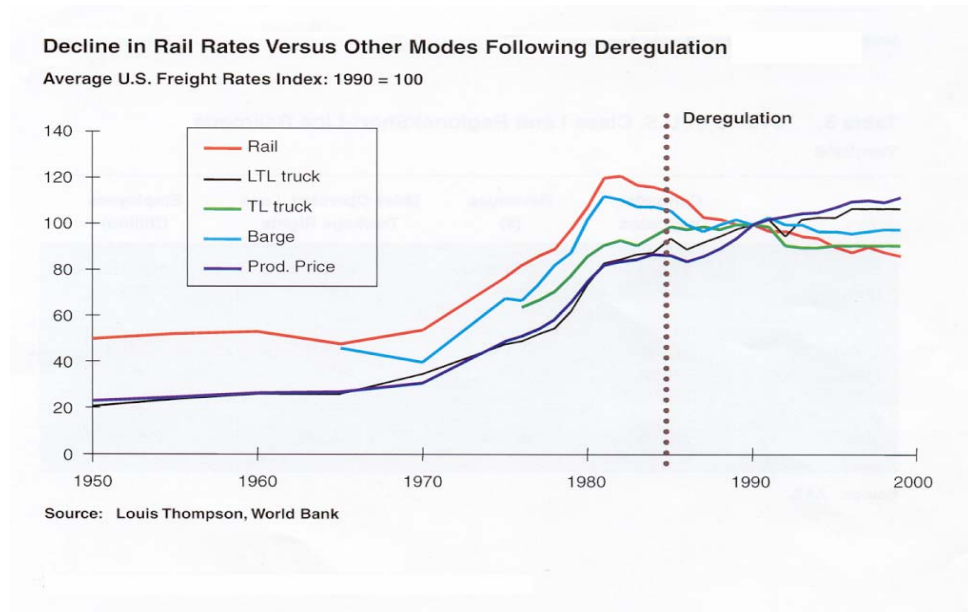
- **Year 2000**
 - Less than 400-500 miles.
 - 145 thousand miles of track
 - Inncity-innerstate movements.
 - Move 33 billion carloads annually.
 - Generates billions of dollars.
-

Railroad Productivity is Increasing



- **Graph – Source: Louis Thompson, World Bank**
 - Stabilized decline that began in the 1950's.
 - In 1981 direction of railroads changed due to deregulation.
 - Railroads could lower or raise rates to customers and get rid of lines that weren't important.
 - Railroads were also free to take on labor contracts.
-

Decline in Rail Rates Versus Other Modes Following Deregulation

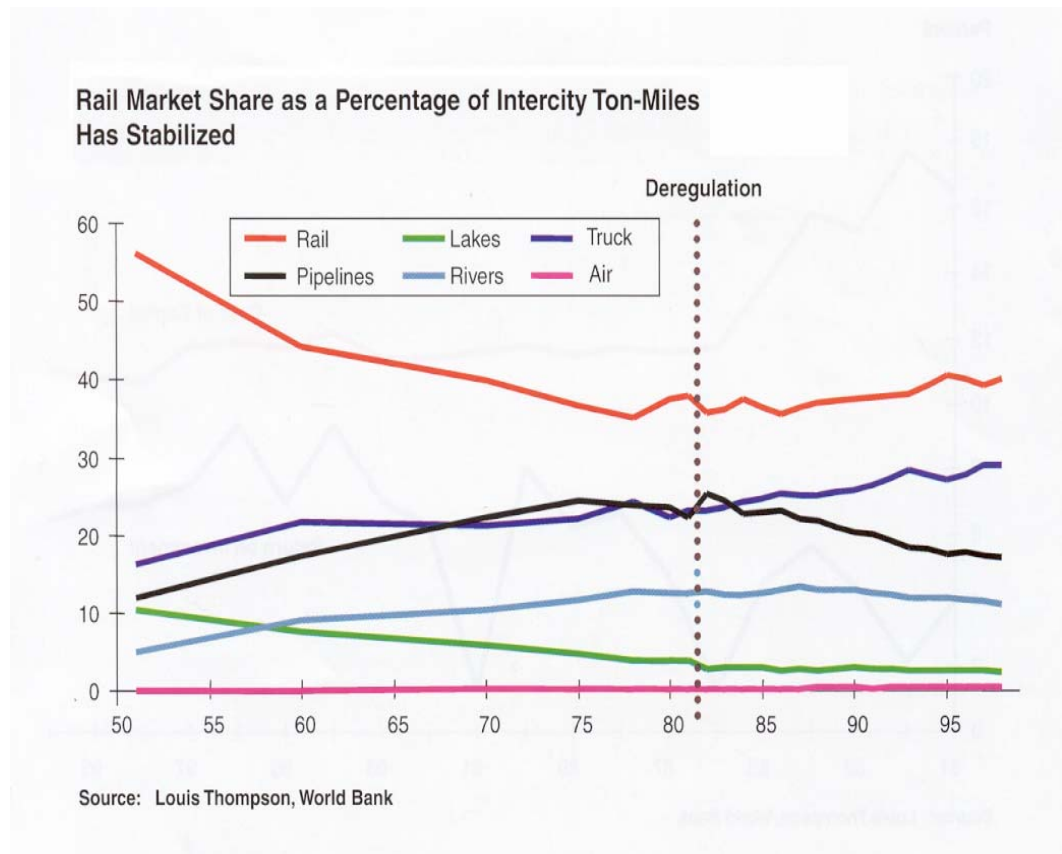


- **Average U.S. Freight Rates Index: 1990**
- **Graph – Source: Louis Thompson, World Bank**
- Rates have changed since deregulations; falling off very significantly.

Railroad Productivity is Increasing

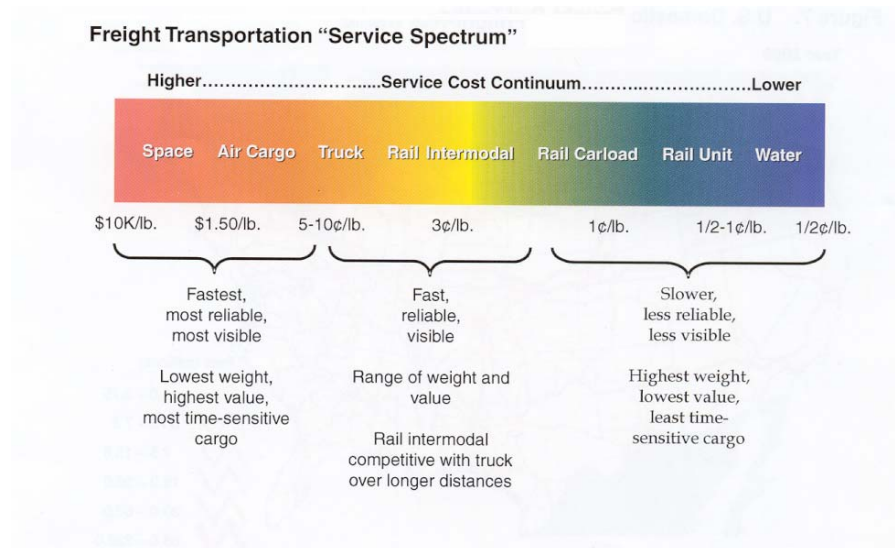
- - **Graph – Source: Louis Thompson, World Bank**
 - Since deregulation, productivity has improved.
-

**Rail
Market
Share as a
Percentage of
Intercity
Ton-Miles
Has
Stabilized**



- **Graph – Source: Louis Thompson, World Bank**
 - Market share has now stabilized.
 - Essentially we have a system that we can maintain.
 - A segment of the freight market that we can serve efficiently.
 - We are limited to that.
-

Freight Transportation “Service Spectrum”



- **Graph of Service Cost Continuum**
- Unit trains are grains, coals, commodities to move in a single trainload.
- Car load is the typical box car traffic.
- Rail intermodal will exceed that of coal for the first time in history.
- Speed and reliability to the rail industry.
- Talking about significant investment in infrastructure.

-
- **Railroads have difficulty earning enough revenue to maintain their tracks and equipment.**
 - **Why?**
 - **Because although railroads haul 40% of the U.S. tonnage, they earn only 6% of total freight revenue.**
-

Railroad Capital Needs Are Far More Intensive Than Other Industries

- **Listing of Expenditures as a Percentage of Revenue for Various U.S. Industries: 2000**
 - **Capital Expenditures as a Percentage of Revenue for various US Industries: 2000**
 - All Manufacturing 3.7%
 - Petroleum and coal products mfg 2.1%
 - Transportation equip. mfg 2.6%
 - Food manufacturing 2.7%
 - Wood product mfg. 3.3%
 - Machinery mfg. 3.1%
 - Fabricated metal product mfg..... 3.7%
 - Primary metal product mfg. 3.8%
 - Paper manufacturing 4.9%
 - Computer and electrical prod. mfg 5.5%
 - Chemicals manufacturing 5.6%
 - Nonmetallic mineral prod. Mfg. 6.2%

• **Class I Railroads**

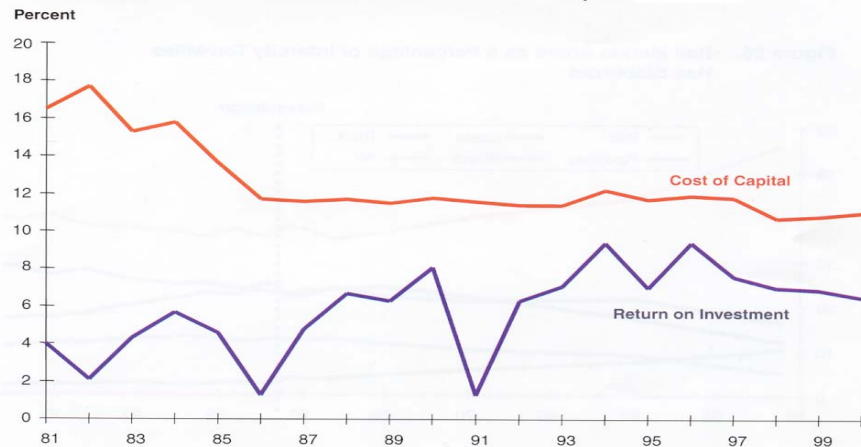
17.8%

Pie Chart of Railroad Capital Expenditures – \$54 billion 1991-2000

- **Equipment and Other 33%**
- **Roadway and Structures 67%**
- Maintain our own right of ways and our own maintenance.
- Improve by only 18%.
- Capital needs are huge.

**Class I Railroad
Return on
Investment
Versus Cost of
Capital**

Class I Railroad Return on Investment Versus Cost of Capital



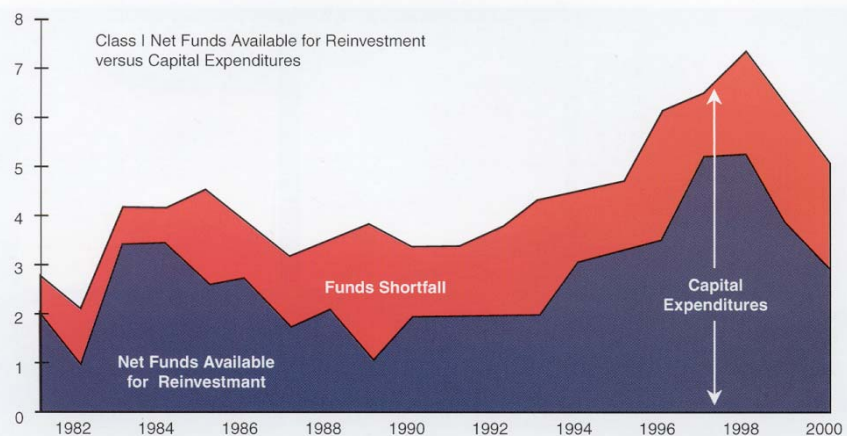
Source: Louis Thompson, World Bank

- **Graph – Source: Louis Thompson, World Bank**
- Graph reflects the shortage; our inability to earn our cost of capital.
- Freight has not been able to generate much return on investment
- Not able to earn our cost of capital.

**Needed Capital
Expenditures
Exceed Class I
Funds Available**

Needed Capital Expenditures Exceed Class I Funds Available for Reinvestment

Billions of Dollars



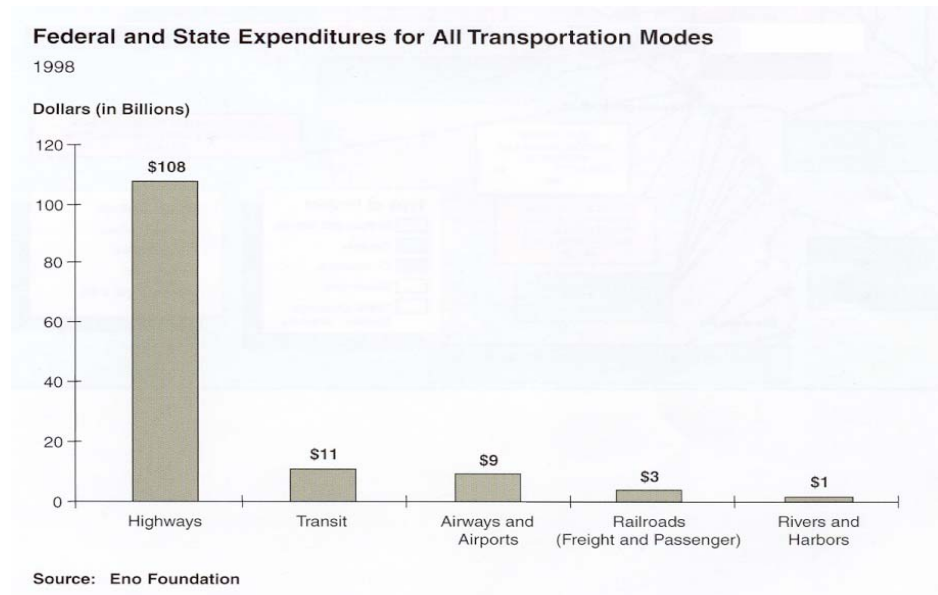
Source: AAR

- **Class I Net Funds Available for Reinvestment versus Capital Expenditures**
- **Funds Shortfall**
- **Net Funds Available for Reinvestment**
- **From 1982 through 2000**
- Continue to fail, maintain service to that proportion share of the freight market.

Transportation Invest in America

- **Freight-Rail Bottom Line Report**
- American Association of State Transportation of Highway Officials (AASHTO) has looked into this issue.
- They have come up with some interesting plots.
- Targeted public investment, quote from AAHSTO estimates that 53 billion dollar public investment as a match to private investment over the next 20 years will remove 14 tons of freights and trucks from highways, which would save roads, and money.

Federal and State Expenditures for All Transportation Modes



- **Graph of Highways, Transit, Airways & Airports, Railroads (Freight & Passenger), and Rivers and Harbors.**
- Currently distribution of transportation modes.
- Tied up in subsidies to AMTRACK.

Public-Private Partnerships

- **Alameda Consolidated Corridor – \$2.4 Billion**
- **Chicago Plan - \$1.5 Billion**
- **International Border Projects**
- **Detroit Intermodal Freight Terminal Study**

- Change in direction to some extent: projects have attracted this investment.
- Alameda loaded product onto trucks and then to railroads to be moved.
- Plan to improve Chicago; MDOT has taken the lead on this.

Q&A

Q Elaborate on what kinds of concerns the rail industry has at the borders?

A Many of the same kinds of concerns that the trucking industry has. Custom issues need to be resolved, inadequate facilities on both sides of the border to do the kinds of inspections necessary. Proposed tunnel to be in the Detroit area.

Q Any specific needs for the short line railroads?

A Desperate need for track infrastructure improvement. Larger carriers moving the large grain cars. Class 2 & 3 gather a lot of grain that goes to the local elevator. Consolidated to Class 1 trains in Saginaw because tracks can handle the larger cars.

Q Grade separations; some public participation through MDOT. Where is CSX going, what is the level of financing?

A We are very supportive of grade separations. Under federal guidelines and regulations, railroads contribution is pegged at 5% of the total cost. Grade separations are particularly important. I-275 literally parallels our main line that runs north and south and is within 250 feet of the interchange. The roads allowed the growth for places like Canton, Plymouth, Northville, however, they are expanding without any thought of the impact on rail movement in their areas. When we do our planning, we want to know where the entrance and exit ramps are on the freeways, the impacts of railroad crossings at exits which could result in backups during rush hours. *(Continued on Next Page)*

Q Railroads offer a viable alternative to the trucking industry; are these two industries collaborating rather than competing?

A The impression has been that these industries are in competition with each other, when in fact they are working together to provide more efficient, low-cost operations for both industries' customers. These two industries are driving the rise in intermodal transportation. Takes advantage of the best aspects of both trucking and railroads. More and more we're finding a way to cooperate to everyone's advantage.

Aviation & Commerce

Expert Speaker: **Dick Lilly, Director, Michigan Business Aviation Association**

AVIATION AND COMMERCE General Aviation

- **Michigan Business Aviation Association**
 - Statistics include all types of aviation.
-

AGENDA

- **General Aviation Defined**
 - **Statistics**
 - **Economic Impact**
 - **Current Concerns**
 - **Small Aircraft Transportation System**
 - **Questions**
-

GENERAL AVIATION

- **Generally Speaking – all Non Military or Commercial Airline**
 - **Corporate**
 - **Business**
 - **Charter**
 - **Agricultural**
 - **Training**
 - **Personal, Sport, Recreational**
 - Some business owners have planes.
 - Corporations have company planes.
-

ECONOMIC IMPACT U. S. Economy

- **Civil Aviation (All Non-Military)**
 - **\$900 Billion to GNP**
 - **Employs 11 Million People**
 - **General Aviation**
 - **\$100 Billion to GNP**
 - GNP = Gross National Product – about 6%.
-

ECONOMIC IMPACT Michigan Economy

- **\$9.4 Billion**
 - **101,000 Jobs**
 - Economic impact on all types of aviation.
-

AIRPORTS

- **U. S. Airports**
 - **5,300 U. S. Airports**
 - **558 Served by Air Carriers**
 - **Michigan Airports**
 - **243 Public Use Airports**
 - **19 Served by Air Carriers**
 - 10% of the airports in Michigan are commercial airports.
 - There are a lot of airports in Michigan that most people aren't aware exists.
 - These are smaller, private airports for private and company use.
-

MICHIGAN AVIATION

- **7,000 Aircraft Registered in Michigan**
 - **18,714 Licensed Pilots in Michigan**
 - **\$14 Million in State Funds Annually**
 - **Close to \$2 Billion Spent on Surface Transportation**
 - **\$130 Million in Federal Funds Each Year for Airport Improvements in Michigan**
-

AIRPORT SAFETY AND PROTECTION PLAN (ASAP)

- **\$6 Million Annually From Parking Tax**
 - **Provides for \$72 Million 5 Year Bond Program**
 - **\$220 Million Annually for Airports (Michigan + Local + Private + Federal Funds)**
 - **Over \$1 Billion Over Five Years**
 - **Creates 32,000 Jobs Over Five Years**
 - **Funds Projects at 98 Michigan Airports**
 - Recently there is an initiative to get dedicated funds in the state.
-

CURRENT CONCERNS

- **Funding**
 - **ASAP is a Short Term Solution**
 - **5 Years**
 - **Need to Establish Permanent Funding Source**
 - **Maximize Leverage**
 - **State & Local Funding Provides Approximately 10%**
 - **Federal Matching Funds at 90%**
 - Continue to look at what we can do beyond the 5 years.
-

CURRENT CONCERNS

- **Preserve Airports**
 - **Some Michigan Airports Threatened**
 - **20 Airports in Michigan Closed in Last 20 Years**
 - **Averaging One Per Year**
 - **Almost Impossible to Re-establish**
 - **New Airport Development Very Difficult**

— **Airports Needed for SATS (Small Aircraft Transportation System)**

- Lots of smaller airports are obtained by developers.
- We need to protect airports and the infrastructure that we have at this time.

CURRENT CONCERNS

- **Security**
- **Safety**
- **Full Access to Airports**
- **Tax Relief for Business Aircraft Transactions (Sales/Use Tax)**
- **Competitive Training Opportunities**
 - **Use Federal Guidelines**
- Security is more of an issue since 9/11.
- Airports try to have as few disruptions as possible.
- Safety is a major concern.
- Restricting certain aircraft to certain airports.
- There has been talk about taxing on-line airline tickets for commercial flights.
- Since 9/11, airports have independently placed restrictions and have stricter requirements on background investigations.

SATS

- **Small Aircraft Transportation System**
 - **NASA Initiative**
 - **Long Range Program**
 - **10-15 Years**
 - **Uses New/Emerging Technology**
 - **Requires Airport Infrastructure**
 - **Mostly Existing Airports**
 - **Economic Opportunity for Michigan**

MI SATS

- **Michigan – The Transportation Technology State**
 - **The Michigan Small Aircraft Transportation System (MI SATS) is a government-industry joint venture designed to develop, evaluate and transfer select commercial and automotive technology to General Aviation applications. MI SATS is a non-profit company with specific technical and market data objectives.**
 - SATS (Small Aircraft Transportation System) may extend beyond 10-15 years.
-

MI SATS

- **Market**
 - To assist participating companies to be first to market with products for General Aviation.
 - To generate public interest for General Aviation air travel.
 - **Product**
 - To develop technology for safe, efficient and economical General Aviation air travel.
 - To demonstrate that automotive technology can be successfully transferred to General Aviation.
 - To demonstrate that non-pilots can safely operate a SATS aircraft in nearly all operating conditions with a confidence similar to operating an automobile.
-

MI SATS

- **Infrastructure**
 - To demonstrate that SATS airport infrastructure is an affordable option for national transportation system investments.
 - To develop and evaluate intermodal transportation business models.
 - To assist a national transition to an improved air transportation system.
 - **Public Advocacy**
 - To build public advocacy for the adoption of SATS.
-

MI SATS

Participating Members

- **Munroe and Associates**
- **National Consortium Aviation Mobility**
- **Oakland County International Airport**
- **State of Michigan Department**
- **Automation Alley Consortium**
- **Gehman Aviation Consulting**
- **Team Vision**
- **DSI**
- **EWI**
- **Western Michigan University**
- **Lawrence Technological University**
- **Oakland University**
- **Diverse Solutions, Inc.**
- **ARNAV**
- **API**
- **Microsoft**
- **ModWorks Inc.**
- **Michigan Association of Airport Executives**

Program is still in the infancy stage; we see a lot of growth in the next eight

years.

MI SATS

- **Why Michigan SATS?**
 - **MI SATS is the only SATS Lab working on the commercial viability of the General Aviation business model through aircraft design, manufacturing, training and infrastructure.**
 - **MI SATS' goal, together with NASA and NCAM, is to shape the way we travel 10 years from now!!**
 - It can reshape the way we travel and provide an economic opportunity for the state of Michigan.
 - Bringing customers to Michigan is economical for the state.
-

Q&A

- Q Some 20 airports have closed over the last 20 years? General aviation in Mason has had some challenges; market related data in terms of economic impacts can provide a benefit that can be quantifiable.
- A A lot of airports that have closed, they don't have significant impact on the economy of the state. We are now currently working on collecting this type of data.
- Q We lost an airport in southeast Michigan; issue is between public and privately owned facilities. What happens to the aircraft based there, do they stay in the state? Where do they move if they stay in the state?
- A There is no hard data. For the most part they are scattered among other local airports.
- Q What are the top two issues that general aviation has problems with?
- A Funding and trying to find a permanent source of funds within the state. Access to airports for public transportation and maintaining access to airports.
- Q In the future do you envision turning our cars in for air travel?
- A We don't have that broad of a vision. There is some difficulty in providing the ability to afford the vehicle. The price range would be the same as the upper end of automobiles. We would need to provide the tools to fly in various weather conditions, put a route structure in place. This is a fascinating program with a lot of options.
- Q Provide in a nutshell where the funding comes from for the airports.
- A Airport funding is a combination of state, local and federal funds, along with some private funds. 10% from state and local communities with 90% from federal funds.
-

Trucking & Trade

Expert Speaker: **Walt Heinritzi, President, Michigan Trucking Association**

- **Four specific questions:**
 - **Range of good and services?**
 - **Value of trucking industry?**
 - **Why trucking is important to the economy?**
 - **Border issues?**
-

- 85% of all trucking is proprietors
- 15% is pure trucking – hauling someone else's materials.
- Smaller parcels are taken to distribution centers and broken down and delivered to destination.
- Operating in a deregulated environment. Nationally in 1980. Basically deregulated the industry. No state can impose any economic regulations. Fairly easy to enter the trucking industry.
- The trucking industry is a mature industry; done revolutionizing the trucking industry.
- Producing gains as the trucking industry evolves.
- Trucks are getting better miles per gallon, using bigger trailers, etc. Profit margins are very thin and highly competitive.
- The trucking industry is an intermodal partner with railroads.
- Some freight more prone to go by rail or ship; eventually will end up on trucks.
- Industry is going through a consolidation.
- The nation's second largest trucking company, Consolidated applied for bankruptcy last year.
- Consolidation will continue to happen for the next few years.
- 608,000 trucks are registered with the federal government in Michigan and the five states that surround us.
- Eventually something will happen and they all won't be around for very long.
- Truckers find a lot of things good in Michigan.
- Michigan is a pro-trucking state.
- Very easy to obtain credentials in Michigan.
- Michigan belongs to all of the interstate pacts.
- Michigan disseminates money out from paying taxes.
- Most of our business is interstate.
- The industry has an entire body of law and regulation.
- Efficient fuel tax collection system, with payments quarterly.

(Continued on Next Page)

- Michigan does not have truck bans and no toll roads; we would rather

finance our roads through other mechanisms.

- Very rational enforcement policy by our state police.
 - Good relationship with the law enforcement.
 - Intermodal partner; interface with other modes of transportation.
 - Where we go is determined by our customers.
 - Outward migration; truckers will be there.
 - Trucking industry is the largest user of railroad users in the country.
 - We ship everything; very vibrant forest industry particularly in the U.P. and small mining in Michigan.
 - Value trucking industries provides: 83% done by truck. 87% in terms of revenue.
 - In most communities trucks are the only means of receiving goods.
 - Truckers are heavy users of the transportation system.
 - Highways are our workplace.
 - It's our duty for maintenance of trucks.
 - There are about 98 billion motorists, of these motorists 10% are trucks.
 - Good return on Michigan's investment.
 - Supported comprehensive fuel tax.
 - Why it's important to the economy; leader of economic activity.
 - Gauge the economy by what's happening in the trucking industry. The more trucks you see on the road, the better the economy is.
 - Production would stop without trucks for distribution.
 - Manufacturing, tourism, agriculture; truckers play a role in all sectors of the economy.
 - There are 120,000 truckers in Michigan.
 - There are about 250,000 employees in the trucking industry which pays about \$10 billion in wages; 5% of the state's gross national product.
 - Border issues: North America Free Trades Act (NAFTA) made U.S. trade grow significantly; \$380 billion between the three countries (Mexico, United States and Canada). There are 13 million annual truck crossings between U.S. and Canada borders, however, not all through Michigan, but Detroit is the #1 border crossing in the U.S.
 - Tremendous congestion problem which is hard on drivers and trucks, and increases costs.
 - 9/11 heightened security emphasis; there are now seven new security initiatives.
 - Patriot Act – know who we're hiring.
 - Seven new agencies; these agencies need to make sure they are talking to each other; information flow needs to be as expeditious as possible.
-

Q&A

- Q Majority of trucking is on interstate highways, what kind of a grade would you give our highways?
- A We don't have any negative feedback from truckers with the respect of interstate highways, however, there are some congestion problems.
- Q Regarding Michigan truck weight laws and how our current laws impact transportation and economy?
- A Michigan has a most liberal gross weight allowance for truckers. Measure on gross weight per axle. This weight is lower than in other states. Basically localized trucking has demonstrated their economic benefit.
- Q Compare and contrast Michigan and its liberal truck weight laws in terms of impact of public safety and road conditions with states contiguous to us? Does this have a disproportionate negative effect on the road surface, safety concerns, and numbers of fatalities?
- A Michigan does allow heavy trucks, the only difference in Michigan is that they are registered in the vehicle code; other states you need a special permit. There are not any more accidents than any other commercial vehicle. The problem with trucks is their stopping capabilities; this issue comes up every 2-3 years. There are extensive public hearings with repetitive testimony from engineers actually more beneficial. I don't know why the roads are better in other states. Most truckers think that Michigan is doing a good job on their roads.
- Q Why is there an increase of trucks at rest areas and trucks resting on exit and entrance ramps; what's causing this?
- A Just In Time (JIT) delivery is probably the major cause. There has been a huge growth in freight demand. Shippers want materials in specified amount of time. Tremendous amount of trucks out there; however, there are not enough shippers out there.
- Q 85% of trucking industry companies which operate their own vehicles with 15% for hire; what is the relation of the competition between other transportation modes? Are they competing for this 15% for hire? Rail transportation is 3 cents and trucking is 5-10 cents; is this because of the rate per hire?
- A The 85% is due to a shift since the trucking agency has been deregulated. Some freight is slipping from private to hiring due to taxes, maintenance, etc. The shift is from private carriers. Whether it moves by rail or by truck is determined by the logistics and cost to the shipper. Rates are dictated by the amount and length of haul. Materials hauled by trucks are more expensive products than those hauled by trains. Trucking is mode where shipment is less than 500 miles.

Q Regarding changes in the trucking industry, what are you specifically talking about?

A I'm not advocating any particular changes just whatever market demands are in the future, we need to be flexible to meet customer demands, i.e., highway infrastructure needs, congestion, etc. Internal challenges are beyond government's ability to solve. The problem is the driving pool, 50% of teamster truckers can retire in the next five years, where will drivers come from? Currently there are not enough drivers to fill the trucks.

Maritime & Trade

Expert Speaker: **David L. Knight, Project Manager, Transportation and Sustainable Development, Great Lakes Commission**

Maritime Transportation and Trade in Michigan and the Great Lakes/Seaway System

- The St. Lawrence Seaway is 2,300 miles in length.
 - The St. Lawrence Seaway system is unique to the world.
 - Michigan is in the unique position to capitalize on the maritime mode.
-

The System Today Great Lakes/St. Lawrence Seaway System

- **Total waterborne cargo of about 200 million metric tons annually.**
 - **Interlake trades serviced by U.S. and Canadian laker fleets.**
 - **Seaway trades serviced by Canadian lakers and foreign flag ocean ships.**
-

The System Today Average annual St. Lawrence Seaway cargo tonnage 1998-2002

- **Total tonnage: 45.7 million metric tons**
 - **Grain: 12.6 million tons**
 - **Iron Ore: 10.6 million tons**
 - **Coal: 4.5 million tons**
 - **General cargo: 4.7 million tons**
 - **Other bulk: 13.2 million tons**
 - **Vessel transits: 4,237**
 - Grain is the biggest sector and is equal between U.S. and Canada as the biggest export.
 - Second is Iron Ore
 - Third is Coal which moves through the Welland Canal and the Montréal Canal.
 - Fourth is general cargo from overseas.
 - Fifth is other bulk such as stone, cement, liquid, etc.
-

The System Today Average annual Great Lakes interlake bulk trade 1998-2002

- **Total cargo: 155.4 million metric tons**
- **Iron ore: 58 million tons**
- **Coal: 38 million tons**
- **Limestone: 33 million tons**
- **Grain: 13 million tons**
- **Salt: 6.6 million tons**
- **Cement: 5 million tons**

- Iron ore is shipped from Michigan's Upper Peninsula and Minnesota.
 - Coal is shipped to rail yards.
 - Limestone is shipped in for steel and construction.
 - Salt is also a major shipment (road salt).
 - Cement also depends quite seriously on lake transportation.
-

Economic Impact: The big picture

- **The most recent system-wide economic impact study found that from 1991 to 2001, the Great Lakes/Seaway system:**
 - **Boosted regional employment to more than 150,000 jobs.**
 - **Generated \$3.4 billion in revenue to firms providing transport and cargo handling services.**
 - **Generated local, state and federal revenues of \$1.3 billion in 2000 alone.**
 - Impact on the Seaway is substantial.
-

What if water transportation on the Great Lakes/Seaway system was not available?

- **It is estimated that this transportation resource reduced the cost of shipping iron ore, coal, stone and aggregates, grain, cement, sale and iron and steel products by \$1.2 billion.**
 - Access to cheaper waterway transportation allows manufacturers to survive.
-

- **“Without this transportation system, it is unlikely that these industries would have initially located in the Great Lakes area, nor could they maintain the current operations at competitive costs.”
Martin Associates, August 2001**
-

Economic Impact: The local level

- **Waterborne cargoes are serving many niche markets in the Great Lakes, with new opportunities always emerging.**
 - Michigan is serving a lot of niche markets and core industries.
-

Report of Seaway Traffic in May, 2003

- Seaway cargo is actually pretty diverse. Cargo is going to large ports, and some smaller ports around the world.
-

Environmental Impact

- **The last modal study completed in 1991 analyzed 11 commodity movement scenarios and found that:**
- **For rail movements, fuel use was 44 percent greater than marine movements.**
- **Rail emissions were more than 47 percent greater than marine emissions.**

- **Shift of less than 1 million tons from marine to trucks would use 3.4 million more gallons of fuel and emit an added 570 tons of air pollutants.**
 - This study is being updated; new numbers available before the end of the year.
-

Michigan's Commercial Ports

- **Michigan has a well-developed marine transportation system.**
 - **40 cargo ports**
 - **Approximately 140 marine terminals**
 - **Public/Private partnerships**
 - **Public Waterways**
 - **Private Marine Terminals (Mostly)**
 - **Private Steamship Companies**
 - In Michigan, the marine transportation system predates both rail and truck modes of transportation.
-

Map of Michigan Ports – 50 Years Ago

- Over 100 ports at that time.
 - These ports handled every type of cargo.
-

Map of Michigan Ports – Today

- Above the 45th parallel is producing stuff.
 - Below the 45th parallel is consuming stuff.
 - Upper Peninsula ports ship out ores, etc.
 - Detroit is largest receiving port on the Seaway system.
-

Michigan's Waterborne Commerce

- **Average volume of cargo handled by Michigan's ports – 93.7 million tons (1992-2001)**
 - **Cargo moves primarily between ports within Great Lakes – St. Lawrence River (98%)**
 - **Limited overseas cargo handled (2%)**
 - **Mostly bulk commodities used in steel, construction, agriculture, and petroleum industries.**
 - **Steel industry accounts for about half of Michigan's waterborne commerce.**
-

Michigan's Waterborne Cargo

- **Pie chart of waterborne cargos.**
 - Michigan has the largest aggregate producing port in the U.S.
-

Resurgence of Passenger Cruise Trade

- Cruise trade has surged on the Great Lakes.
-

Great Lakes Cruise Passengers

- **Graph of Great Lakes Cruise Passengers (1996-2003)**
 - Cruise ships were very popular in the 1950's.
 - Dwindled from the 1960's to now.
 - Cruise ships are coming back to the Great Lakes
 - The drop from 2002 to 2003 was due to a loss of large operators; not a drop in demand.
-

- **Picture of a French cruise ship at Saugatuck.**
 - Michigan is destination orientation for cruise industry.
 - Sites, ports and scenery on the Great Lakes is a major attraction.
-

- **Picture of the Columbus cruise ship.**
 - The Columbus carries 400 passengers and will be coming back to the Great Lakes next year.
-

Michigan Ferry Services

- **Currently operating on 20 routes.**
 - **Operators include both public agencies and private firms.**
 - **Serve a wide variety of functions ranging from basic transportation, to island supply, to tourism.**
-

Looking ahead

- **Many of the core Great Lakes/Seaway trade patterns will likely continue, and many of the same commodities will likely define the system's cargo profile.**
 - **Downbound grain**
 - **Upbound steel and iron**
 - **Project cargos**
 - **Forest products**
 - **Chemicals, edible oils**
 - **Coal**
 - **Fertilizers**
 - **Ores**
-

Looking ahead

- **Some things to look for:**
 - **More entrepreneurial operators modeled after a relatively new genre of carriers using smaller, more versatile vessels in niche markets.**
 - Seeing more interest; captains now owning their own vessels.
 - **Short sea shipping: relieving highway and rail congestion through the use of short coastal routes for both feedstock supply and product distribution.**
 - This is being done in Europe and has been very successful..
 - **Retrofitting existing vessels with measures to control aquatic nuisance species.**
 - **Ballast management systems integrated into new vessel designs.**
 - New ships will have systems built in to protect from sea nuisances.
 - **Great use of tug/barge configurations, as opposed to conventional self-propelled vessels.**
 - Last big carrier was built in 2000; tug barge.
 - **Greater use of navigation and telecommunication technologies to improve efficiency and safety.**
 - New improvements such as tracking ships; like airports track planes.
 - **New propulsion technologies aimed at improving fuel economy and reducing emissions.**
 - Automation is now standard equipment.
 - **More cross-lake ferry routes with both passenger and freight capability.**
 - New ferry in 2004 between Muskegon and Milwaukee.
 - **Better integration with the inland river system.**
 - More intermodal opportunities; combine trucks and water modes.
 - **Continuing efforts to develop intermodal movements with the Great Lakes/Seaway system.**

A safe, efficient, environmentally responsible marine transportation system will continue to play a role in Michigan's long range transportation strategy.

Q&A

- Q Surprised that oversea cargo is only 2%; has this caused a great economic impact on the state because of the zebra mussels -- because of invasive species, this is costing Michigan more dollars for transporting overseas; is their talk of finding other modes because of invasive species?
- A Industry knows it has responsibility; however, this is difficult because target is not defined. The industry acknowledges that this is a problem that has to be solved in the short run and also the economic impact; total agreement and understanding across the board. A movement to solve

this issue has started. Other markets are served by the seaway and could not exist without it.

Q Lower lake level a problem?

A Absolutely, loads are a lot lighter. A concern but what can you do. We can only control the things we can control and live with those we can't. There has been an impact on ferry contracts because of their sophisticated equipment; they need to change loading conditions.

Q Articles in paper about points in the Soo Locks adequacy and lack of adequacy.

A Improvements of the Soo Locks are underway, which Michigan has played a big role in. Only one lock can handle a 1,000 foot vessel which has been a source of worry for many years. The improvements have designed a second lock and are ready to go. The federal government and eight great lake states will share cost; so far three states are locked in on funding this project. Corps of Engineers ready to release new cost figures which are higher than last time. If everything goes right, ground will be broken in late 2004, early 2005 and will take about six years to complete the project. Michigan counts for 25% of cargo moving through the Soo Locks.

The Economic Importance of Our Border Crossings

Expert Speaker: **Kris Wisniewski, Federal / Bi-National Policy Specialist, Policy Division,
Michigan Department of Transportation**

Economic Importance of Michigan's Borders

- **Border crossings are critical to the health of Michigan's and the nation's economy.**
-

International Trade – Value

- **\$160 billion in trade passes through Michigan land ports**
 - **Detroit at \$100 billion is the #1 land port in North America**
 - **Port Huron at \$57 Billion is #3**
 - **This includes trucks, rails, trunk lines.**
-

Michigan Trade with Canada A Special Relationship

- **Michigan's overall trade with Canada in 2002 - \$66 billion**
 - **18.6% of total U.S. - Canada trade**
 - **93 percent of trade with the Ontario**
 - **Industrial hub of Canada is Ontario.**
-

Canadian Trade – Origin/Destination

- **Surface trade with Canada**
 - **Michigan - \$94 billion**
 - **60% of all trade passing through Michigan ports**
 - **40% is Canadian trade with 27 other states, including:**
 - **Indiana**
 - **Ohio**
 - **Illinois**
 - **Kentucky**
 - **Texas**
 - **Also have surface trade with Mexico.**
-

Canadian Trade What's Crossing the Border

- **70% - Vehicles, electronics and precision goods**
 - **17% - Metal products and machinery**
 - **5% - Wood, textiles, and leather products**
 - **3% - Pharmaceuticals and chemical products**
 - **Major manufacturing systems rely on Michigan having a good transportation system.**
 - **Primary goods, typically high value goods.**
 - **Tied to the auto industry.**
-

Canadian Trade Truck	<ul style="list-style-type: none"> • \$52 billion • Ambassador Bridge and Blue Water Bridge are top 2 commercial vehicle crossings on the U.S./Canada border <ul style="list-style-type: none"> — 4.7 million truck crossings per year — 13,095 truck crossings per day • 29,000 through the Ambassador Bridge in Detroit. • 4,000 through the Blue Water Bridge in Port Huron. • Blue Water Bridge is the fastest growing truck traffic from Canada. • Seeing growth in truck traffic across our borders since 9/11.
Truck Trips Crossing the U.S.-Canada Border in 1999	<ul style="list-style-type: none"> • Map of the U.S. with lines representing truck trips crossing the U.S. to Canada. • The Soo Locks are the 28th busiest port in the U.S. and Canada.
Impact of International Truck Flows on Michigan's Highway Network	<ul style="list-style-type: none"> • Map of Michigan with lines representing truck flows on Michigan's Highway Network. • Heavy burden of international traffic. • The blue lines represent international trade. • The gray lines represent all traffic. • 75% of trucks south of Detroit are international trade. • We are battling with Washington DC to get more recognition for federal funds. • I-94 is one of our top corridors.
Michigan Trade Rail	<ul style="list-style-type: none"> • \$40 billion with Canada and Mexico • 45% of all North American rail trade <ul style="list-style-type: none"> — Next largest is California at 10% • Port Huron at \$22 billion is the #2 rail port in North America • Detroit at \$15 billion is #3
Cross Border Commerce and Tourism	<ul style="list-style-type: none"> • Passenger traffic between Michigan and Ontario generates millions of dollars for local and regional economies • 20 million passenger cars crossed between Michigan and Ontario in 2002 <ul style="list-style-type: none"> — 25% work-related — 40% dining, entertainment, and casinos — 12% shopping • This is down 20% due to delays of increased security. • The NEXUS program could have potential benefits here.

What does the future hold?	<ul style="list-style-type: none"> • 150% growth in cross border truck traffic by 2030 • 70% growth in passenger traffic • Between now and 2030 there will be smaller growth of passenger traffic.
Critical Issues Facing Michigan's Borders	<ul style="list-style-type: none"> • Security • Congestion
Homeland Security	<ul style="list-style-type: none"> • MDOT's top priority — Protect our critical transportation infrastructure • Would have a devastating impact on Michigan and half of the country. • Government taking steps on protecting our international bridges.
Congestion	<ul style="list-style-type: none"> • Picture of Railroad Tracks Near Sarnia, and Bridge To U.S.A. • Congestion at the Blue Water Bridge in Port Huron. • Back-up was 26 kilometers.
Costs of Border Congestion	<ul style="list-style-type: none"> • \$10 billion/year to the U.S. economy • \$150/hour - average cost of border delays • \$154 million/ year in delay costs at the Blue Water Bridge • With more than double the traffic, annual delay costs at the Ambassador Bridge are significant greater • Study completed by Dr. John Taylor, Wayne State University. • Study is available for those who would like to see it. • Costs are higher at the Ambassador Bridge.
Long Term Costs of Border Congestion to Michigan's Economy	<ul style="list-style-type: none"> • By 2020, \$1billion/year in foregone production and output to Michigan's economy • By 2030, \$5 billion/year • Major impacts on just-in-time delivery systems
Primary Reasons for Border Congestion	<ul style="list-style-type: none"> • Unprepared drivers • Lack of sufficient border inspection staff • Expanded security processes • Growth in traffic • Inadequate border infrastructure

(Continued on Next Page)

- The #1 problem is unprepared drivers, they don't have their paperwork completed and are sent to a secondary site, which is turning into a large parking lot.
 - Over 30% of trucks are required to go to secondary site because of paperwork not done correctly.
 - There are 50 parking spaces and approximately 1,000 trucks go through each day.
 - Backups and congestion at border crossings are huge.
 - Less of a problem with major carriers or carriers who only have one type of goods on their trucks.
 - Each shipment needs to have separate paperwork completed.
 - 2-3 mile long back-ups into Canada every Tuesday and Wednesday.
 - Looking for a new security process.
 - One way to address this issue is by U.S. Customs making inspections before entering Canada and then checked from there.
 - Michigan is working on addressing this issue.
-

Strategies for Reducing Border Congestion

- **Require pre-processing of all commercial vehicles**
 - **Fully staff border crossings**
 - **Maximize participation in programs designed to facilitate processing of low-risk travelers, shippers, carriers and drivers**
 - **Expand infrastructure capacity**
 - Have paperwork accurately completed before arriving at borders.
 - Need fast lanes for those who do have paperwork in order.
 - Free and Secure Trade (FAST) program.
-

MDOT's Vision for Michigan's Border Crossings

- **Establish and maintain a transportation border infrastructure network that allows for the seamless movement of people, goods, and services in a cost-efficient, timely, safe and secure manner.**
-

MDOT's Border Goals

- **Protect our infrastructure**
 - **Expand capacity at our crossings**
 - **Expand collaboration and coordination with:**
 - **homeland security agencies**
 - **Canadian transportation and border agencies**
 - **Michigan's private border crossing operators**
 - **Private sector users of Michigan's crossings**
-

MDOT's Border Initiatives

- **Border Investments will exceed \$700 million**
 - **Border Partnership New Crossing Study**
 - **Ambassador Bridge Gateway Project**
 - **Detroit Intermodal Freight Terminals**
 - **Blue Water Bridge Plaza Expansion**
 - Need a new crossing in Detroit, which will require public and private investments.
 - \$200 million expansion project at the Blue Water Bridge.
-

Q&A

Q What about the Border initiative for a proposed rail tunnel; will private sectors put up the cash?

A There is one of five possible corridors.

Q Regarding unprepared drivers, what can be done to make them more prepared? Also, with increased security in terms of contrabands and dangerous materials, is there a likelihood of using bomb or contraband dogs? Would this increase the speed for going through inspections?

A In answer to the second question, Customs and the INS are introducing more animals for sniffing different kinds of contrabands, however, not sure if this would speed up the inspection process. There is x-ray technology to scan the entire truck which has the potential to more quickly inspect vehicles. More analysis of security causes more traffic congestion. In answer to the first part the question, a couple initiatives are being developed, such as setting up a pre-processing center where paperwork can be done and then electronically sending information to the border crossing. This has been tried at the New York bridge and has reduced congestion by 15%. There is an effort to develop this in Michigan. Pre-clearance, how to accomplish this? Seal the vehicle and keep it sealed. These are some major tools; larger companies would use these tools more so than smaller companies.

Q Why do we have to have secondary inspections? Why go through at the border itself? Do this someplace else?

A A lot of people are talking about promoting a program where cargo is cleared at loading site and foreign countries would be examined before they enter; however, this is a long way down the road as there are a lot of national issues, etc. Even at the safest border at a minimum the goal is to contain the criminal element. How do you move the 98% low risk through quickly and be able to focus on that 1-2% - everyone's working on it.
